

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented) A device for positioning a total knee prosthesis, comprising:

a tensioning component having

- a tensioning component plate configured to be supported on a tibial cut surface,

- sliding means extending from said tensioning component plate,

- a slide displaceable on the sliding means in a direction substantially perpendicular relative to the tensioning component plate and having means for being temporarily fixedly joined to an ancillary component,

- an ancillary component i) comprising a tibial plate and a centro-medullary rod extending from the tibial plate, and ii) configured to receive adjusting means of variable thicknesses, the adjusting means positioned at the end of a femur when a knee is in a state of flexion at approximately 90°, to allow spacing in an extended state of an articulation to be obtained,

- a motor means for displacing the slide and thereby tensioning the knee by way of the tensioning component plate pressed on the tibial cut and the ancillary component fixedly joined to the slide,

- a drilling guide mounted on the sliding means and having drilled holes for positioning a cutting block on the femur to allow posterior femoral cuts to be brought about,

the drilling guide configured to receive means for palpating an anterior portion of the femur for positioning the drilling guide in alignment with the anterior portion,

- reference means for determining a position of the slide and/or the drilling guide relative to the tensioning component plate and therefore determine an interarticular space available in the state of flexion, and

- a size estimation component for palpating an anterior end of the femur, the size estimation component having a member configured to slide on the sliding means, the member having a transverse palpating arm articulated about a shaft parallel with a sliding axis of the member on the sliding means,

the device thus allowing either a position of a distal femoral cutting plane to be determined by determining a difference between a spacing in a state of extension and a space in the state of flexion, or a position of a posterior femoral cutting plane to be determined in order to obtain approximate

equality between the spacing in the state of extension and the space in the state of flexion.

2. (cancelled).

3. (previously presented) The device according to claim 1, wherein a dimension of the tensioning component plate is such that a femoral end can be received between the tensioning component plate and the size estimation component, in the manner of a calliper rule.

4. (previously presented) The device according to claim 1, further comprising:

a distal cutting guide support having i) a member (51) configured to slide on the sliding means and an arm extending from said member which extends parallel with an axis of the knee in the state of flexion, and ii) means for receiving and for fixing the distal cutting guide at a precise location, the precise location determined by a calculation of the difference between the spacing in the state of extension and the space in the state of flexion.

5. (previously presented) The device according to claim 1, wherein the slide is configured to be displaced by means of an

assembly comprising a screw and a nut to slide the slide and place the knee in a state of tension.

6. (previously presented) The device according to claim 5, wherein the sliding means have an internal runner and the slide is guided in the internal runner, and

the sliding means have an outer surface for guiding at least the drilling guide, the slide having a portion which allows the drilling guide to be moved.

7. (previously presented) The device according to claim 1, wherein the drilling guide is configured to receive a palpating arm configured to press on an anterior surface of the femoral end to limit the insertion of the drilling guide on a guiding means in order to optimise a drilling position.

8. (previously presented) The device according to claim 1, wherein the slide has

i) reliefs for precise positioning, relative to the slide, of the tibial plate of the ancillary component, and

ii) a rapid fixing means for temporarily fixedly joining the tibial plate to the slide.

9-18. (cancelled).

19. (currently amended) A device for positioning a total knee prosthesis, comprising:

a medullary rod having a proximal end, the medullary rod configured to be introduced into a femoral medullary canal;

a rod base attached to the proximal end of the medullary rod, the rod base having i) a face configured to contact the femoral condyles when the medullary rod is disposed within the femoral medullary canal, and ii) a base mounting element;

a means for providing support ~~tibial plate having a lowermost surface configured to be supported~~ on an upper surface of a tibial cut; and

a displacement element comprising a distal end extending from the means for providing support ~~tibial plate~~ and being attachable to the base mounting element such that the medullary rod is approximately parallel to ~~the~~ an upper surface of the means for providing support ~~tibial plate~~,

wherein the displacement element is operable to displace the means for providing support ~~tibial plate~~ and the bearing on an upper surface of the tibia with respect to the rod base.

20. (currently amended) The device of claim 19, wherein,

the rod base is a plate with a first surface and a second surface opposite the first surface, the second surface being generally planar,

the base mounting element is an oblong passage with a central hole and diametrically opposed notches,

the mounting displacement element [[is]] comprises a bayonet element for engagement with the oblong passage,

the means for providing support has a ~~tibial plate~~ is generally planar lowermost surface, and

the displacement element is aligned with a tibial axis.

21. (previously presented) The device of claim 20, wherein,

the displacement element comprises i) a slide housing extending from the upper surface of the means for providing support ~~tibial plate~~, and ii) a slide displaceable on the slide housing, the slide housing and the slide positioned over the means for providing support ~~tibial plate~~,

the bayonet element is attached to the slide, and

the rod base, when mounted on the slide, is positioned in approximately perpendicular with the upper surface of the means for providing support ~~tibial plate~~.

22. (currently amended) The device of claim 19, wherein,

the displacement element comprises i) a slide housing extending from the upper surface of the means for providing support ~~tibial plate~~, and ii) a slide displaceable on the slide housing,

the rod base mounts to the slide, and

the rod base, when mounted on the slide, is positioned approximately perpendicular with the upper surface of the means for providing support ~~tibial plate~~.

23. (currently amended) A device for displacing a tibia and a femur, the tibia having a tibial axis and a cut proximal surface, and the femur having a femoral medullary canal, comprising:

an ancillary component comprising a medullary rod and an attachment part attached at a proximal end of the medullary rod, the medullary rod configured to be introduced into the femoral medullary canal;

a tensioning device comprising:

i) a means for providing support ~~tibial plate~~
~~configured to be supported~~ on an uppermost surface of the cut tibia,

ii) a first component that is attached at one end to the supporting means ~~tibial plate~~, and

iii) a second component that is attached to the attachment part of the ancillary component,

wherein, the first component and the second component are movable with respect to one another so as to displace the ~~connecting element~~ attachment part and the supporting means ~~tibial plate~~ with respect to each other between i) a first position wherein the medullary rod and tibial plate are separated by a first distance as measured along the tibial axis, and ii) a second position wherein the medullary rod and tibial plate are separated by a second distance as measured along the tibial axis, the second distance being greater than the first distance.

24. (currently amended) The device of claim 23, wherein,

the attachment part comprises an oblong passage with a central hole and diametrically opposed notches,

the supporting means ~~tibial plate~~ is generally planar with ~~the a~~ a lowermost planar surface configured to be supported on a tibial cut with a lowermost surface of the ~~displacement component~~ supporting means and the first component bearing against the tibial cut, and

the ~~displacement element~~ second component is vertically aligned with a tibial axis.

25. (currently amended) The device of claim 23, wherein,

the attachment part comprises a rod plate,

the supporting means ~~tibial plate~~ is configured to be supported on ~~the~~ an uppermost surface of the tibial cut extending completely across the tibia with a lowermost surface of the ~~displacement component~~ supporting means and the first component bearing against the tibial cut with the ~~displacement component~~ supporting means and the first component being completely vertically above the tibia using an upper surface of the supporting means ~~tibial plate~~ located opposite the ~~lower~~ lowermost surface of the supporting means as a horizontal reference, and

the ~~displacement element~~ second component engages with the rod plate with the rod plate being approximately 90 degrees to the lower most surface of the supporting means ~~tibial plate~~.

26. (previously presented) The device of claim 23, wherein,

the first component is comprises a slide housing and the second component is a slide, the slide being configured to slide with respect to the slide housing.

27. (new) A method of using the device of claim 19 for positioning a total knee prosthesis, during the positioning the device being utilized to bring about tensioning of articulation and facilitate cutting and balancing operations for a

practitioner during a total knee prosthesis operation, comprising the steps of:

with the medullary rod, disposing at least a portion of the medullary rod within the femoral medullary canal of the femor;

with the medullary rod disposed within the femoral medullary canal, pressing the face of the rod base against a distal face of at least one femoral condyle of the femor;

contacting the upper surface of the tibial cut of the tibia with the means for providing support on the upper surface of the tibial cut; and

operating the displacement element to displace i) the means for providing support and thereby the upper surface of the tibia, with respect to ii) the rod base and thereby the femor.

28. (new) A method of using the device of claim 27, wherein the medullary rod is rotated relative to the rod base.